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Centralines District Plan Submission.

Centralines is an Electricity Distribution Network located in Central Hawkes Bay. Centralines is 100% community owned via the Central Hawkes Bay Consumers Power Trust.

CL is the 3rd most dispersed net work in the Country with nearly 1800km of lines network stretching from Pukehou to Herbertville servicing 8847 of customers. This low level of customers to infrastructure makes the Centralines network expensive to operate relative to other densely populated urban networks.

After decades of flat to negative population growth, Central Hawkes Bay has seen unprecedented population growth in the last three years making us the 2nd fastest growing region by percentage in the country. This has flowed through to record levels of new connections in the Centralines network. Based on CHBDC provided consenting and population forecasting, this rapid growth is expected to continue.

People are also recognising the advantages of CHB's sunny climate, and this has seen Centralines have the second highest percentage increase in solar installations in the country, as well as high levels of interest in grid scale solar farms in the Onga Onga region.

Major Industrial customers have indicated they are looking to expand their operations in CHB due to the availability of suitably zoned land which is in limited supply in Hastings or Napier. At a local level commercial / industrials customers are looking to replace their fossil fuel heat processes with low carbon technologies such as electricity.

The above factors plus the wider drive to reduce emissions, particularly the replacement of internal combustion engines with electric vehicles, has seen Centralines complete extensive modelling on the increased load demands on its network. This forecasting shows that significant infrastructure upgrades will be required in the short to medium term.

For this reason, Centralines submitted on the proposed Central Hawkes Bay District plan, particularly on the Renewable Energy and Infrastructure areas. Centralines is generally supportive of the proposed district plan with only two areas that require the Commissioners consideration.

These points are technical in nature and are relevant as if they were adopted in their current form, it would significantly add to the cost of completing the infrastructure upgrades needed. As all Centralines shareholders are also it's customers, it is these households and businesses which will ultimately have to carry the cost of this.

The two submission points that Centralines wishes to raise are;

NU-R2 c) the voltage of an existing line must not increase beyond the voltage at which the existing line has been constructed to operate.

- Given the likely need to increase network capacity, in its current form the Proposed District Plan would mean Centralines is unable to upgrade from say 11kV to 33kV which is a commonly deployed voltage throughout it's network.
- This would lead to the perverse situation where Centralines could build a new 22kV or 33kV line in the road reserve without issue or restriction but changing insulators on an existing line and running it at 22kV or 33kV would not comply. A new build would obviously incur a much higher cost than the upgrade option, which would not be in the best interests of community expenditure on critical infrastructure.
- This restriction on changing voltage doesn't appear to be a part of any other district plan in the multiple territorial authorities that Centralines and associated network Unison operates in. Many of these authorities have undertaken a district plan review in recent years and it is therefore unclear what the rationale is to include in the proposed CHB district plan.

The recommendation is to remove the above restriction from the proposed District Plan.

NU-S3 Height for Above Ground Buildings and Structures

- The above rule states that buildings in residential areas cannot exceed 3.5m and 5m in commercial areas.
- As outlined there is likely to be major upgrades to the network required in the near future due to population growth and the conversion to low carbon energy sources. These upgrades will conceivably require the installation of additional above ground buildings and structures such as substations. Modern substations are often housed in doors to reduce noise and visual effects but would be unable to comply with the 3.5m height restriction.

- The proposed plan also sets out a restriction for pole heights in residential areas. As outlined in Centralines submission, the required pole heights are determined by voltage and ground levels etc as set out in the Electricity Code, specifically ECP34. As such these rules are not something Centralines can voluntarily choose to disregard, potentially meaning non-compliance with the terms of the proposed the district plan.
- The pace of change in the electricity and wider energy sectors, means that we will likely see major advancements within the proposed 10 yr review period of the district plan. The above restrictions allow little scope to accommodate the infrastructure that would enable these new technologies. The recent upswing in solar installations would be a good example of technology that wasn't even considered in the previous district plan but is being rapidly adopted at present.

The net effect of these height restrictions is that at the least it will increase the cost to undertake the upgrades needed, which will ultimately have to be borne by the consumers of Central Hawkes Bay. A perverse outcome may also be that Centralines is unable to provide the requested network connections due to a lack of supply capacity. This would limit growth in the region and mean that consumers would have to have to continue with or install costly and potentially carbon intensive alternatives.

The recommendation is to remove the above height restrictions from the proposed District Plan, or as a minimum make the height requirements discretionary as occurs in many other District plans.